

Oklahoma Water Resources Bulletin & Summary of Current Conditions

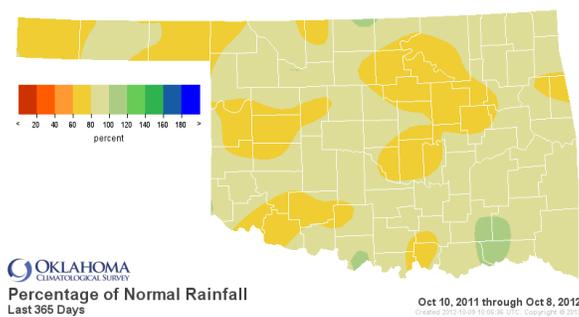
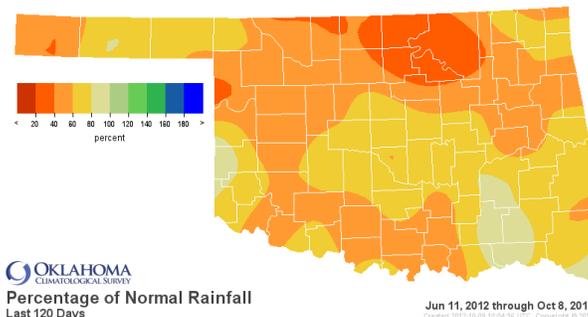


October 11, 2012

PRECIPITATION

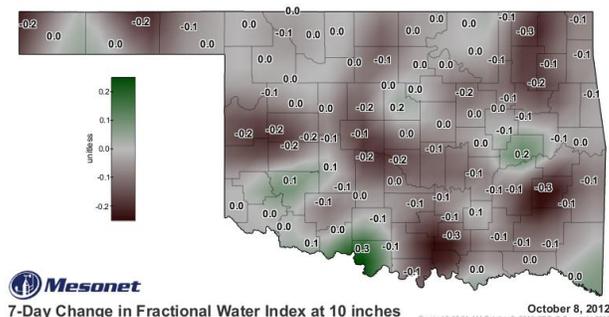
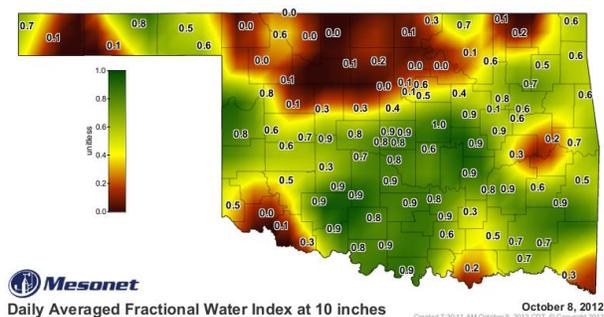
Statewide Precipitation

CLIMATE DIVISION	Last 120 Days June 11, 2012 – October 8, 2012				Last 365 Days October 10, 2011 – October 8, 2012			
	TOTAL RAINFALL (INCHES)	DEPARTURE FROM NORMAL (INCHES)	PERCENT OF NORMAL	RANK SINCE 1921	TOTAL RAINFALL (INCHES)	DEPARTURE FROM NORMAL (INCHES)	PERCENT OF NORMAL	RANK SINCE 1921
Panhandle	5.39"	-3.86"	58%	10th driest	15.75"	-5.30"	75%	16th driest
North Central	5.10"	-7.37"	41%	4th driest	26.17"	-5.40"	83%	32nd driest
Northeast	7.37"	-7.76"	49%	5th driest	35.27"	-6.58"	84%	26th driest
West Central	6.24"	-4.88"	56%	12th driest	22.53"	-6.48"	78%	24th driest
Central	8.10"	-5.20"	61%	10th driest	30.32"	-7.55"	80%	27th driest
East Central	9.31"	-5.84"	61%	10th driest	38.32"	-7.63"	83%	27th driest
Southwest	7.21"	-4.60"	61%	17th driest	25.96"	-4.74"	85%	36th driest
South Central	7.98"	-5.63"	59%	16th driest	34.64"	-6.18"	85%	28th driest
Southeast	11.69"	-3.59"	77%	26th driest	48.30"	-2.48"	95%	42nd wettest
Statewide	7.54"	-5.49"	58%	6th driest	30.65"	-5.93"	84%	26th driest



SOIL MOISTURE

Fractional Water Index¹ October 8, 2012



¹ The Fractional Water Index ranges from very dry soil having a value of 0 to soil at field capacity illustrated by a value of 1. [1.0-0.8 = Enhanced Growth; 0.8-0.5 = Limited Growth; 0.5-0.3 = Plants Wilting; 0.3-0.1 = Plants Dying; <0.1 = Barren Soil.]

DROUGHT INDICES

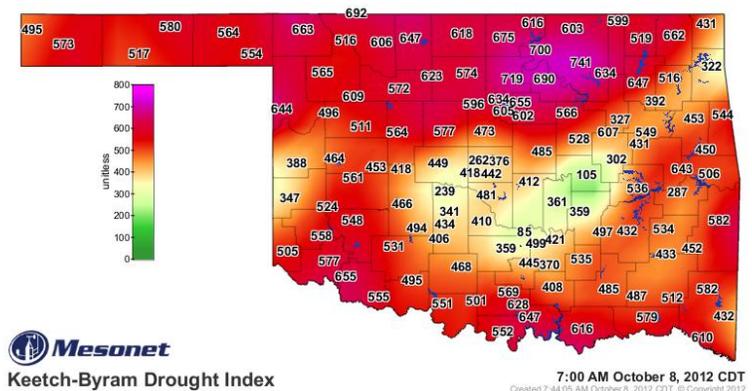
Palmer Drought Severity Index ¹					Standardized Precipitation Index ² Through September 2012			
CLIMATE DIVISION	CURRENT STATUS 10/6/2012	VALUE		CHANGE IN VALUE	3-MONTH	6-MONTH	9-MONTH	12-MONTH
		10/6	9/8					
Northwest	SEVERE DROUGHT	-3.60	-4.93	1.33	ABNORMALLY DRY	SEVERELY DRY	NEAR NORMAL	NEAR NORMAL
North Central	SEVERE DROUGHT	-3.40	-3.59	0.19	SEVERELY DRY	MODERATELY DRY	NEAR NORMAL	NEAR NORMAL
Northeast	SEVERE DROUGHT	-3.52	-3.76	0.24	MODERATELY DRY	EXTREMELY DRY	SEVERELY DRY	MODERATELY DRY
West Central	MODERATE DROUGHT	-2.91	-3.96	1.05	NEAR NORMAL	MODERATELY DRY	NEAR NORMAL	NEAR NORMAL
Central	SEVERE DROUGHT	-3.12	-4.03	0.91	ABNORMALLY DRY	MODERATELY DRY	NEAR NORMAL	NEAR NORMAL
East Central	SEVERE DROUGHT	-3.20	-4.14	0.94	NEAR NORMAL	MODERATELY DRY	NEAR NORMAL	NEAR NORMAL
Southwest	MODERATE DROUGHT	-2.65	-4.01	1.36	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL	NEAR NORMAL
South Central	SEVERE DROUGHT	-3.25	-4.18	0.93	NEAR NORMAL	MODERATELY DRY	NEAR NORMAL	NEAR NORMAL
Southeast	SEVERE DROUGHT	-3.32	-3.70	0.38	NEAR NORMAL	EXTREMELY DRY	NEAR NORMAL	NEAR NORMAL

- All nine climate divisions continue to experience either severe or moderate drought conditions, according to the PDSI, but conditions have improved. All nine climate divisions have undergone a PDSI moisture increase since September 8. Eight climate divisions (all but the Southwest) continue to experience near long-term dry conditions, according to the SPI.

Keetch-Byram Drought Fire Index³

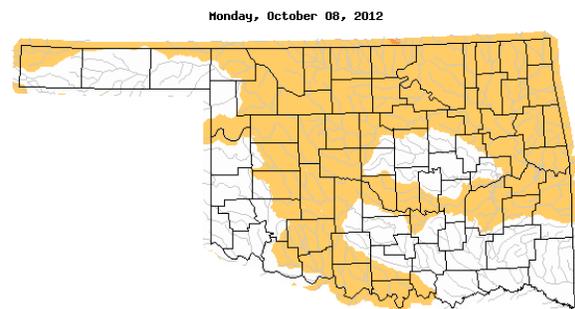
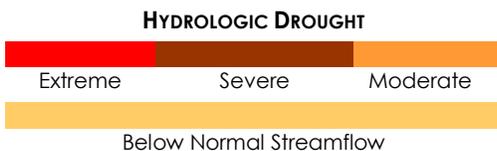
MESONET STATION	CLIMATE DIVISION	CURRENT VALUE 10/8/2012
Wynona	Northeast	741
Red Rock	North Central	719
Burbank	Northeast	700

- Stations currently at or above 600 (October 8) = 29
- Stations above 600 on September 10 = 92



STREAMFLOW CONDITIONS

October 8, 2012



¹ The Palmer Drought Severity Index is based upon precipitation, temperature, and soil moisture. Though widely used by government agencies and states to trigger drought relief programs, the PDSI may underestimate or overestimate the severity of ongoing dry periods.

² The Standardized Precipitation Index, more sensitive than the PDSI, provides a comparison of precipitation over a specified period with precipitation totals from that same period for all years included in the historical record. The 3-month SPI provides a seasonal estimation of precipitation while the 6-month SPI can be very effective in showing precipitation over distinct seasons.

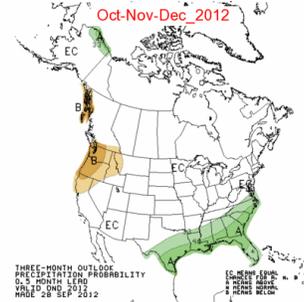
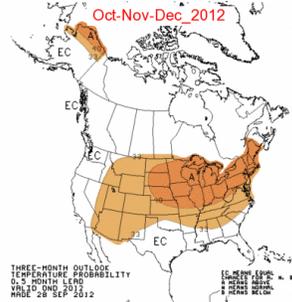
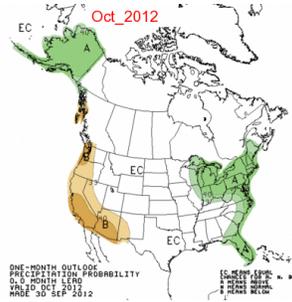
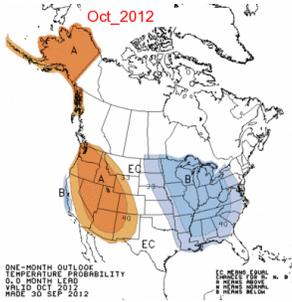
³ The Keetch-Byram Drought Index measures the state of near-surface soil moisture (within the uppermost eight inches of soil) as well as the amount of fuel available for fires. KBDI values of 600 and above are often associated with more severe drought and increased wildfire occurrence.

WEATHER/DROUGHT FORECAST

Seasonal Outlook

October 2012

Oct-Nov-Dec 2012

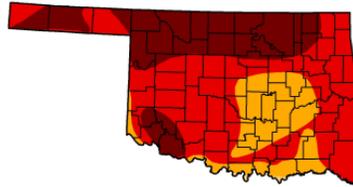


Regional Drought Summary & Outlook

U.S. Drought Monitor Oklahoma

October 9, 2012
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	100.00	99.71	80.57	30.53
Last Week (10/02/2012 map)	0.00	100.00	100.00	99.71	80.12	28.21
3 Months Ago (07/10/2012 map)	0.28	99.72	99.15	38.61	10.83	0.00
Start of Calendar Year (12/27/2011 map)	14.83	85.17	78.76	50.55	27.48	3.33
Start of Water Year (09/25/2012 map)	0.00	100.00	100.00	99.98	95.33	42.09
One Year Ago (10/04/2011 map)	0.00	100.00	100.00	100.00	78.97	69.82



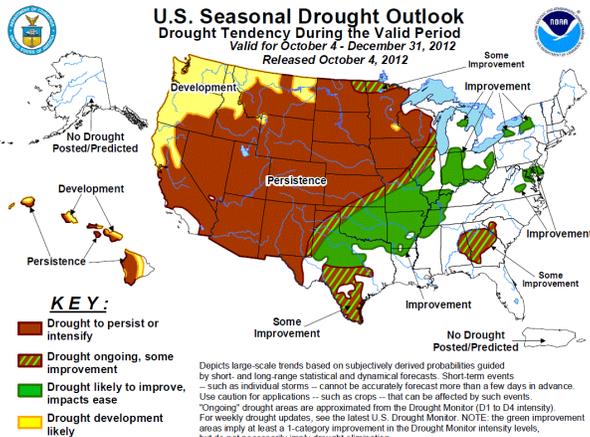
Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://droughtmonitor.unl.edu>

USDA National Drought Mitigation Center
Released Thursday, October 11, 2012
Matthew Rosenkrans, NOAA/NWS/NCEP/CPD



October 9—The latest U.S. Drought Monitor reports that continued dry conditions prompted the expansion of drought conditions across Oklahoma and central Kansas. Across Kansas, continued dry conditions prompted the expansion of extreme drought conditions to cover the entire south-central portions of the state. Impacts range from agricultural (Kansas winter wheat was at 65% planted by Sunday, slightly ahead of average, however, it was only 25% emerged, which is below average) to ecological (the Cheyenne Bottoms Wetlands had seen a dramatic reduction in coverage of water). Further north, reports out of Nebraska had less than one-third of winter wheat fields as emerged, 12 days behind average. Across Missouri, rainfall totals ranging from 0.5-1.4 inches did little to alleviate severe and extreme (D3) drought conditions.

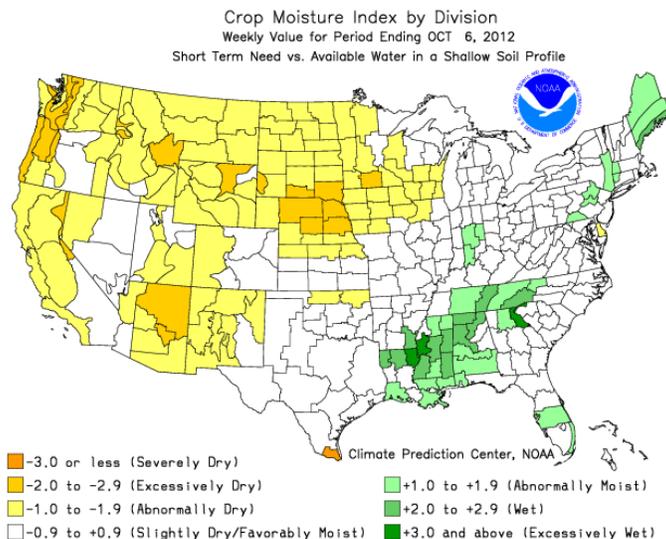
While conditions have improved somewhat, more than 80 percent of Oklahoma remains in Extreme Drought. More than 30 percent of the state—including much of northern and southwest Oklahoma—is considered Exceptional, the worst drought category.

According to the latest Drought Outlook (October 4), prospects for drought improvement have increased across the southern Great Plains, including much of Oklahoma. However, drought is likely to persist or intensify across the Panhandle region and much of the western and north central U.S.

CROP REPORT SUMMARY

October 9, 2012 – Fall temperatures and widespread precipitation were received across Oklahoma last week, but did little to improve crop conditions. Many reports from around the state mentioned persistently low pond levels.

Conditions were favorable for producers seeding wheat last week with the number of planted acres jumping 24 points. Some operators were reported shredding to destroy extremely poor cotton fields in order to prepare them for wheat planting. Cotton and peanut harvest were beginning to get underway, while corn and sorghum harvest both continued well ahead of the average pace. Topsoil moisture supplies barely moved from the previous week with 28 percent rated very short, 33 percent short, and 39 percent adequate this week as compared to 25 percent very short, 31 percent short, 42 percent adequate, and two percent surplus the previous week. Subsoil moisture supply ratings were unchanged from the previous week with 58 percent rated very short, 31 percent short and 11 percent adequate. There were 5.6 days considered suitable for fieldwork last week.



RESERVOIR STORAGE

October 8, 2012

